List of Current Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 7 (Cancelled).

8. (New) An apparatus for determining and/or monitoring a process variable of a medium, comprising:

a membrane

an oscillatable unit secured to said membrane:

a sending/receiving unit, which excites said oscillatable unit to oscillate and which receives oscillations of said oscillatable unit

a control/evaluation unit, which, on the basis of the oscillations of said oscillatable unit, monitors and/or determines the process variable, wherein:

said sending/receiving unit comprises a disk-shaped, piezoelectric element; and said disk-shaped, piezoelectric element has at least two segments, which are essentially polarized oppositely to one another; and

at least two electrodes of opposite polarity are applied to the side of said disk-shaped, piezoelectric element facing away from said membrane.

- (New) The apparatus as claimed in claim 8, wherein:
 exactly two electrodes are applied to the side of said disk-shaped, piezoelectric element facing away from said membrane.
 - 10. (New) The apparatus as claimed in claim 8, wherein: said electrodes have essentially the same shape.
 - 11. (New) The apparatus as claimed in claim 10, wherein: said electrodes have the shape of semicircular segments.
 - 12. (New) The apparatus as claimed in claim 8, wherein:

said electrodes are so structured and arranged that they annularly surround themselves.

- 13. (New) The appparatus as claimed in claim 8, wherein: said piezoelectric element is provided on the side facing said membrane at least partially with a conductive coating.
 - 14. (New) The apparatus as claimed in claim 18, wherein: the side facing said membrane is connected electrically conductively with ground.